∽DELPHI SERIES



Delphi Series Q48DV, 40W Quarter Brick, Dual Output DC/DC Power Modules

The Delphi Series Q48DV Quarter Brick, 48V input, dual output, isolated DC/DC converters are the latest offering from a world leader in power systems technology and manufacturing -- Delta Electronics, Inc. This product family provides dual regulated outputs with a flexible combination of output current and power up to 40W in a very cost effective industry standard footprint. With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance, as well as extremely high reliability under highly stressful operating conditions. All models are fully protected from abnormal input/output voltage, current, and temperature conditions. The Delphi Series Q48DV converters meet all safety requirements with basic insulation.

FEATURES

- High efficiency: 86% @ 1.5V/8A, 3.3V/6A
- Low profile: 2.28"×1.45"×0.33"
- Flexible current allocation on each output
- Low voltage output (O/P 1) starts up first
- Fixed frequency operation
- Input UVLO, Output OCP, OVP, OTP
- Basic insulation
- No minimum load required
- ISO 9001, TL 9000, ISO 14001, QS9000, OHSAS18001 certified manufacturing facility
- UL/cUL 60950 (US & Canada), TUV (EN60950) and CE mark pending

OPTIONS

- Positive On/Off logic
- Short pin lengths
- Heatsink available for extended
 operation

APPLICATIONS

- Telecom/DataCom
- Wireless networks
- Optical network equipment
- Server and data storage
- Industrial/Test Equipment





SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS			
Input Voltage		36~75V	Voltage Accuracy	Typical	±1%	
Switching Frequency	Typical (3.3V)	300KHz	Line Regulation	Typical	±0.1%	
Isolation Voltage	In/Out	1500V	Load Regulation	Typical	±0.2%	
Isolation Capacitance	Typical	2000 pF	Ripple & Noise	Typical	50 mV	
Isolation Resistance	Minimum	10M Ohms	Current Limits	Typical	130%	
MTBF	Bellcore (3.3V)	TBD	Over Voltage	Typical	120%	
OTP	Typical	110°C	Voltage Trim		+10%, -10%	
Size		2.28"×1.45"×0.33"				

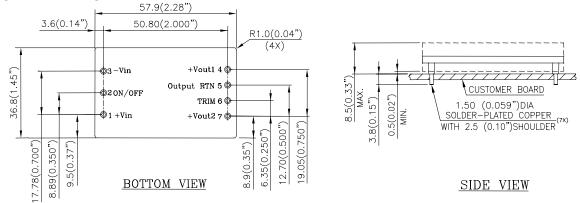
PART NUMBERING SYSTEM

Q	48	D	V	1R5	33	Ν	R	F	Α
Product	Input	Number of	Product	Output	Output	ON/OFF	Pin		Option
Туре	Voltage	Outputs	Series	Voltage 1	Voltage 2	Logic	Length		Code
Q - Quarter Brick	48V	D - Dual Output	V - Value line	1R0 - 1.0V 1R2 - 1.2V 1R5 - 1.5V 1R8 - 1.8V 2R5 - 2.5V	33 - 3.3V	N - Negative P - Positive	R - 0.150" N - 0.145" K - 0.110"	F- RoHS 6/6 (Lead Free)	A - Standard Functions

MODEL LIST

MODEL NAME	INF	TUT	OUTPUT *		EFF @ Full Load	
Q48DV2R533NRFA	36V~75V	1.6A	2.5V/10A	3.3V/10A	87.0%	
Q48DV1R833NRFA	36V~75V	1.4A	1.8V/10A	3.3V/10A	86.5%	
Q48DV1R533NRFA	36V~75V	1.3A	1.5V/10A	3.3V/10A	86.0%	
Q48DV1R233NRFA	36V~75V	1.2A	1.2V/10A	3.3V/10A	86.0%	
Q48DV1R033NRFA	36V~75V	1.1A	1.0V/10A	3.3V/10A	85.5%	

* Note: Total output power should not exceed 40 watts, maximum output current for each channel is 10A. MECHANICAL DRAWING



NOTES: DIMENSIONS ARE IN MILLIMETERS AND (INCHES) TOLERANCES: X.Xmm±0.5mm(X.XX in.±0.02 in.) X.XXmm±0.25mm(X.XXX in.±0.010 in.)

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WARRANTY

Delta offers a two (2) year limited warranty. Complete warranty information is listed on our web site or is available upon request from Delta.

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